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With its patent, Defendant CSI teaches various systems relating to health kiosks. The systems generally contain a “kiosk,” “a controller,” “local storage,” a “user-interactive display,” and several other components.^{2/} In many of the claims, the controller must be “capable of communicating with a remote server” and must include various “logic.”^{3/} The ‘436 patent also includes claims for methods of operating such systems.^{4/}

The parties dispute the meaning of the following terms^{5/}:

1. Controller
2. Local Storage
3. Kiosk
4. Diagnostic Equipment
5. Health Services and Information System
6. User-Interactive Display
7. Health Test Interface
8. Local Storage Element Allocated for the User
9. Remote Storage Element Allocated for the User
10. Logic for Controlling Storage of the User Health Test Result in the Local Storage in a User Local Storage Element Allocated for the User
11. Logic for Controlling Storage of the Health Test Result in the Remote Storage in a User Remote Storage Element Allocated for the User
12. Logic for Controlling the Health Test Interface to Perform Measurements on a User to Acquire User Health Test Measurement Data
13. Logic for Processing the User Health Test Measurement Data to Generate a User Health Test Result
14. Logic for Controlling Display of the User Health Test Result and a Health Test Result History via the User-Interactive Display
15. Logic, at Least Partly Executable on the Controller and at Least Partly Executable on the Remote Server, Providing Access to Health-Related Information via the Interactive Display^{6/}
16. Logic for Receiving from the Remote Server Health-Related Services and Information

²*E.g., id.* at col. 14, ll. 44-54.

³*Id.* at col. 14, ll. 53-67.

⁴*E.g., id.* at col. 18, ll. 21-41.

⁵*See* Doc. [39-1](#).

⁶The parties’ claim chart lists this term “Logic, at least partially . . .” *Id.* at 96. The actual claim language, however, is “Logic, at least *partly* . . .” [‘436 patent](#), at col. 16, l. 39 (emphasis added).

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On March 19, 2015, the Court held a *Markman* claim construction hearing. The parties have also filed a joint claim construction and pre-hearing statement,^{7/} as well as opening and responsive briefs on claim construction.^{8/} After laying out the legal standards, the Court addresses each disputed term in turn.

II. Legal Standard

The construction of a patent, including terms of art used within its claims, is a question of law.^{9/} When interpreting a disputed claim term, the Court first looks to the intrinsic evidence of record, i.e., the patent itself, specifically, the patent claims, the specification and, if in evidence, the prosecution history.^{10/} The intrinsic evidence gives the most significant guidance regarding the interpretation of disputed claim language.^{11/}

In *Phillips v. AWH Corp.*,^{12/} the Federal Circuit reiterated the standards used to interpret patent claims. Among these, a “‘bedrock principle’ of patent law [is] that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’”^{13/} Thus, “the claims are ‘of primary importance, in the effort to ascertain precisely what it is that is patented.’”^{14/}

The claims, however, should not be read in isolation but “must be read in view of the

⁷See Doc. [43](#).

⁸Docs. [32](#), [33](#), [37](#), [38](#). Defendant CSI also sought and received permission to file supplemental briefing responding to changes in Plaintiff HealthSpot’s proposed constructions. Docs. [40](#), [41](#).

⁹See *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 383-91 (1996).

¹⁰See *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979-80 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996).

¹¹*Vitronics Corp. v. Conception, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

¹²[415 F.3d 1303 \(Fed. Cir. 2005\) \(en banc\)](#).

¹³*Id.* at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)).

¹⁴*Phillips*, 415 F.3d at 1312 (quoting *Merrill v. Yeomans*, 94 U.S. 568, 570 (1876)).

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specification, of which they are a part.”^{15/} Thus, after considering the claim language, the Court must next look to the specifications.^{16/} The specification is “always highly relevant to the claim construction analysis” and “is the single best guide to the meaning of a disputed term.”^{17/}

The terms of a claim “are generally given [the] ordinary and customary meaning . . . that the term[s] would have to a person of ordinary skill in the art in question at the time of the invention”^{18/} Courts thus interpret claims through the eyes of a person having ordinary skill in the art or field of the invention. That person “is deemed to read the words used in the patent documents with an understanding of their meaning in the field, and to have knowledge of any special meaning and usage in the field.”^{19/}

The Court may also consider other claims in the patent, including both asserted and unasserted claims.^{20/} The usage of a term in one claim may shed light on the meaning of the same term in other claims. The claims “are part of ‘a fully integrated written instrument,’ consisting principally of a specification that concludes with the claims. For that reason, claims ‘must be read in view of the specification of which they are a part.’”^{21/} Claim terms should be construed, when possible, “in a manner that renders the patent internally consistent.”^{22/}

III. Analysis

There are two primary categories of disputed terms. The first are “non-logic” terms. The

¹⁵*Id.* at 1315 (internal citation omitted).

¹⁶*Vitronics Corp.*, 90 F.3d at 1582.

¹⁷*Phillips*, 415 F.3d at 1315 (internal citation omitted).

¹⁸*Id.* at 1312-13.

¹⁹*Id.* at 1313.

²⁰*Id.* at 1314.

²¹*Id.* at 1315 (quoting *Markman*, 52 F.3d at 978-79).

²²[*Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1379-80 \(Fed. Cir. 2001\).](#)

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second are terms relating to “logic” for accomplishing certain tasks.

A. The Non-Logic Terms

1. Controller

The parties’ dispute over the how to define “controller” has two primary issues. First, Plaintiff HealthSpot says that “controller” refers to a single controller, while Defendant CSI says “controller” can mean one or more controllers. Second, Plaintiff HealthSpot says that as used in the patent, a “controller” must perform the various designated logic functions. Defendant CSI agrees that a controller not capable of performing this logic would not infringe, but says that this limitation comes from elsewhere in the claims, not from the definition of “controller” itself. The Court considers each dispute in turn.

Turning first to the question of whether “controller” is necessarily singular, the Court agrees with Plaintiff HealthSpot that the “controller” element refers to a singular controller. To begin, the language of the patent itself refers to “a controller.” It is true that the specification says that “[i]n the claims, unless otherwise indicated, the article ‘a’ is to refer to ‘one or more than one.’”^{23/} In relying upon this generalized specification, Defendant CSI relies upon a thin reed.

Defendant CSI says that by including this language, it has acted as its own lexicographer for the word “a.” But here, the remainder of the intrinsic evidence—especially the prosecution history—“otherwise indicate[s],” thus taking this use of “a” in connection with “controller” outside this provision’s coverage.

During its patent application prosecution, Defendant CSI argued to the PTO that its invention did not read on the prior patent issued to Ballantyne. In major part, Defendant CSI distinguished

^{23/} [436 patent](#), at col. 14, ll. 41-42.

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Ballantyne because “The Ballentyne [sic] system does not include *one controller* that executes methods and procedures for *both* controlling network communications and processing a health care measurement.”^{24/} CSI responds that it distinguished Ballantyne by arguing that “[t]he controller in the system disclosed by Ballantyne et al does not include logic for controlling acquisition of data and logic for processing the health management data.” CSI says its argument relied upon its inclusion of logic within the controller, not on the number of controllers.^{25/}

Although CSI’s amendments did not change the number of controllers, CSI significantly relied upon its single controller to distinguish Ballantyne. Ballantyne contains multiple controllers.^{26/} And CSI’s emphasis on its single controller was deliberate and conspicuous. CSI distinguished Ballantyne with alternative arguments: 1) Ballantyne was distinguishable because CSI’s controller incorporated controlling logic; and 2) Ballantyne was distinguishable because CSI used a single controller while Ballantyne disclosed multiple controllers.

CSI’s disclosure of a single controller was important to receiving the ‘436 patent. Otherwise, there would have been no reason for CSI to reference “one controller” in its arguments to the PTO.

Finally, Defendant CSI attempts to save its preferred construction by pointing to one embodiment in the specification that refers to multiple “processor[s].”^{27/} CSI unconvincingly argues that “processor” is necessarily equivalent to controllers.^{28/} Not persuasive. But even assuming this

²⁴Doc. [34-4](#) at 10 (emphasis added).

²⁵See Hr’g Tr. at 5.

²⁶See Patent No. 5,867,821 (“‘861 patent”), at col. 5, l. 8 (“communications controller”); *id.* at col. 10, ll. 46-47 (“a specific memory controller”).

²⁷See [‘436 patent](#), at col. 8, ll. 14-18.

²⁸[Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc., 381 F.3d 1111, 1119 \(Fed.Cir.2004\)](#) (“[W]hen an applicant uses different terms in a claim it is permissible to infer that he intended his choice of different terms to reflect a differentiation in the meaning of those terms.”).

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equivalence, a single embodiment in the specification is insufficient to overcome the argument CSI made to the PTO that the prior art did not have “one controller” that performed the functions in question.

The Court finds that the ‘436 patent discloses a single controller.

The parties next dispute whether “controller” must incorporate underlying logic. Plaintiff says “controller” should be interpreted to require needed logic. Defendant CSI contends that “controller” should not require any logic although the controlling logic may be otherwise required by the ‘436 patent.

This issue recurs throughout the parties’ list of disputed claims. In particular, many of Plaintiff HealthSpot’s proposed definitions include aspects that Defendant CSI does not deny are patent requirements, but says should not be included in the definitions of the terms themselves.

In this instance, Defendant CSI agrees that only a “controller” that could carry out the “logic” requirements would infringe, but says that including the logic requirements in the definition of “controller” would render the claim redundant.^{29/}

Although close, Plaintiff HealthSpot has the better argument. Most important, the ‘436 patent supports an interpretation of controller that requires the controller to incorporate logic. Claim 1 of the ‘436 patent describes:

What is claimed is:

1. A kiosk-based system for accessing health-related services and information, comprising:
a controller;

* * *

the controller * * * *comprising*:

²⁹Hr’g Tr. at 15-16.

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logic for controlling the health test interface to performing measurements on a user to acquire user health test measurement data;
logic for processing the user health test measurement data to generate a user health test result;
logic for controlling storage of the user health test result in the local storage in a user local storage element allocated for the user; and
logic for controlling storage of the health test result in the remote storage in a user remote storage element allocated for the user.^{30/}

The Oxford English Dictionary defines comprise: “to embrace as its contents, matter, or subject.”^{31/} Merriam Webster describes comprise in a similar way: “to be made up of (something) : to include or consist of (something).”^{32/} Claim 1 describes the controller as comprising or including the logic.

In prosecuting the ‘436 patent, Defendant CSI argued that its invention was different from Ballantyne because: “[t]he *controller in the system disclosed by Ballantyne et al does not include logic* for controlling acquisition of data and logic for processing the health management data.”^{33/} Defendant CSI said that “Claim 1 is amended to clarify that the controller includes at least [the four logic requirements].”^{34/} In this context, CSI’s used the word “includes.” The prosecution history supports Plaintiff HealthSpot’s argument that the logic functions are themselves part of the term “controller” rather than simply being an additional requirement of the patent.

Ultimately not much appears to be at stake in this dispute regarding whether “controller” requires logic be programmed into the controller. Both parties agree that an invention without a

^{30/} ‘436 patent, at col. 14, ll. 45-67 (emphasis added).

^{31/} *OED Online*, Oxford Univ. Press, <http://www.oed.com/view/Entry/37893> (last visited Mar. 2015).

^{32/} *Merriam-Webster*, <http://www.merriam-webster.com/dictionary/comprise> (last visited Mar. 2015).

^{33/} Doc. [34-4](#) at 10 (emphasis added).

^{34/} Doc. [34-4](#) at 10.

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controller that performs the various logic function would not infringe.^{35/} Against that backdrop, the Court concludes that adopting Plaintiff HealthSpot's position requiring the controller incorporate logic terms is more consistent with the language of the patent and the prosecution history.

Accordingly, the Court construes the term "controller" to mean "a single processor such as a CPU, microcontroller, or microprocessor that includes logic for controlling the health test interface; for processing the user health test measurement data to generate a user health test result; for controlling storage of the user health test result in local storage; and for controlling storage of the health test result in remote storage."

2. Local Storage

Plaintiff HealthSpot asks the Court to construe "local storage" to mean "[a] memory located at the kiosk that stores user information."^{36/} Defendant CSI responds that the term means "[m]emory device located at the kiosk."^{37/} Thus, the difference between the two parties' construction appears to be whether "local storage" must be used to store "user information."

Defendant CSI's primary argument against including this phrase, however, goes more to the length of time such information is stored, not whether it is stored at all. Both parties point to a portion of the specification that says "[t]ypically, an individual health information kiosk includes a processor or controller with a storage or memory that maintains a local archive of user information that stores a relatively small number of relatively recent test results, measurements, and possibly

³⁵Defendant CSI's summarized its position on this dispute at the *Markman* hearing. See Hr'g Tr. at 16. ("The claim itself requires that the controller contain that logic. So it would be duplicative and redundant to have the controller require that logic and then have the claim require that logic. It is just already in the claim.")

³⁶Doc. [39-1](#) at 8.

³⁷*Id.*

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other information.”^{38/}

Defendant CSI additionally focuses on language in the next paragraph of the specification that says “[i]n one example, the local health information kiosk stores information from many users and all information that is generated on the health information kiosk is automatically loaded, for example on a daily basis, to the central health information server.”^{39/} But even this language indicates that the local storage stores health test results for a period for up to a day. And a dependent claim adds an element of “logic . . . that automatically transfers data in the local storage to the remote storage,” suggesting that such a transfer is not a requirement of the corresponding independent claim.^{40/} Finally, another portion of the specification envisions the local storage preserving the ten most recent measurements, apparently regardless of the time period between tests.^{41/} The Court thus finds Defendant CSI’s arguments against construing “local storage” to include storing user health information unavailing.

Relatedly, Defendant CSI argues that there is no need to treat a description of what is being stored as part of the definition of “local storage” itself. The Court does not agree. The word “storage” ordinarily includes reference to some particular piece of information that can later be retrieved.^{42/} And both the claims and specification make clear that what is being stored is, at least in part, “user information.”

Accordingly, the Court construes the term “local storage” to mean “a memory device located

^{38/} [436 patent](#), at col. 4, ll. 1-5 (numbers referencing figures omitted).

^{39/} *Id.* at col. 4, ll. 23-28 (numbers referencing figures omitted).

^{40/} *E.g., Id.* at col. 15, ll. 38-39; *see also id.* at col. 19, ll. 46-48 (“The method of claim 37, further comprising: automatically transferring data in the local storage to the remote storage.”).

^{41/} *Id.* at col. 13, ll. 29-30.

^{42/} *See, e.g., OED Online, Oxford Univ. Press, <http://www.oed.com/view/Entry/190925>* (listing a definition for “computing” of “[t]he placing or keeping of data and instructions in a device from which they can be retrieved as needed”) (last visited Mar. 2015).

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at the kiosk that stores user information.”

3. Kiosk

Plaintiff HealthSpot suggests that a kiosk is “[a]n interactive display coupled to the controller which provides access to health services and information.”^{43/} Defendant CSI says that kiosk should be interpreted as “[a] free-standing machine that houses in a common structure a system that provides information to the public.”^{44/}

The parties’ definitions differ in three major ways. First, Defendant CSI believes a kiosk must be a “free-standing machine,” while Plaintiff HealthSpot would define kiosk more generally as “an interactive display coupled to the controller.” Second, CSI would require the kiosk to “house [its system] in a common structure.” And third, while both parties agree that a “kiosk” must provide information, Plaintiff HealthSpot would require this information be “health services and information,” while Defendant CSI would specify that the information must be provided “to the public.” The Court observes that—likely due to maneuvering for later invalidity arguments—Defendant CSI’s proposed construction is narrower than Plaintiff HealthSpot’s.

As to whether a “kiosk” must be a “free-standing machine,” the Court agrees with Defendant CSI that it must be free-standing. The Court concludes that the plain and ordinary meaning of “kiosk” describes a structure that is free-standing, and that nothing overcomes this ordinarily used meaning. It is true that the PTO read the term “kiosk” more broadly to include, for example, a hand-held device.^{45/} But Defendant CSI is not bound by comments of the PTO,^{46/} and the Court concludes

⁴³Doc. [39-1](#) at 12.

⁴⁴*Id.*

⁴⁵Doc. [34-16](#) at 29.

⁴⁶[3M Innovative Props. Co. v. Avery Dennison Corp.](#), 350 F.3d 1365, 1373 (Fed. Cir. 2003)

(“[P]rosecution history . . . cannot be used to limit the scope of a claim unless the *applicant* took a position before
(continued...)”)

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that the PTO's inferred construction was unduly broad.

On the other hand, Defendant CSI's argument that "kiosk" must "house [the system] in a common structure" is flawed. Several dependant claims specify that the kiosk must house certain components of the system.^{47/} These claims would be superfluous if the kiosk inherently had to house all components of the system.

Finally, Plaintiff HealthSpot has the better argument as to what and to whom the "kiosk" must provide access. The preamble to Claim 1 of the '436 patent states "[a] kiosk-based system for accessing health-related services and information."^{48/} This implies that what the "kiosk" allows access to is indeed "health services and information." And although specification language does suggest placement in public places such as pharmacies,^{49/} nothing in the claims suggests that a kiosk would not be a kiosk if it were located in a home or other location not accessible to the public.

Accordingly, the Court construes "kiosk" to mean "a free standing machine that provides access to health services and information."

4. Diagnostic Equipment/Health Test Interface

Because Defendant CSI argues that "diagnostic equipment" should be interpreted to mean the same thing as "health test interface," the Court considers these two terms together.

Defendant CSI says that "diagnostic equipment" and "health test interface" should have the same meaning because they are used interchangeably in the claims and specification. Plaintiff

^{46/}(...continued)
the PTO.'" (quoting *Schwing GmbH v. Putzmeister Aktiengesellschaft*, 305 F.3d 1318, 1324-25 (Fed. Cir. 2002) (alteration and omission in original)).

^{47/}[436 patent](#), at col. 15, ll. 61-65; *id.* at col. 17, ll. 41-44; *id.* at col. 19, ll. 35-39; *id.* at col. 20, ll. 19-24, 46-50.

^{48/}*Id.* at col. 14, ll. 44-45.

^{49/}*E.g., id.* at col. 2, ll. 12-22.

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HealthSpot disagrees and says that “diagnostic equipment” should simply be given its plain and ordinary meaning. At the *Markman* hearing, Plaintiff HealthSpot clarified that its primary objection to treating the two terms as interchangeable is that HealthSpot believes that diagnostic equipment must play a role in diagnosing medical conditions rather than merely providing measurements. For example, Plaintiff HealthSpot does not believe that a blood pressure cuff qualifies as “diagnostic equipment” because it only measures blood pressure, without, for example, diagnosing a user as having high blood pressure.^{50/}

In support of this position, Plaintiff HealthSpot points to the prosecution history that it says distinguishes “diagnostic equipment” from a “health test interface.” Specifically, in attempting to demonstrate that Defendant CSI’s invention was conceived before a prior art reference, CSI told the PTO:

There are a myriad of documents describing the development of the blood pressure cuff assembly and the weight scale, which enable the kiosks to collect health metrics of a user. Thus, evidence supporting the conception of the health test interface is clear. Likewise, the same testing device has dual functionality as it can be used as diagnostic equipment to assess the user’s health condition by comparing the collected metrics with the user’s historical data and standard data of the population.^{51/}

HealthSpot says, and the Court agrees, that this passage provides some support for treating the “health test interface” and “diagnostic equipment” as distinct terms where the “health test interface” obtains measurements and the “diagnostic equipment” transforms the measurements together with history and outside information into diagnoses.

The Court concludes, however, that other factors outweigh this prosecution history. First,

⁵⁰Hr’g Tr. at 33.

⁵¹Doc. [34-22](#) at 10.

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the plain and ordinary meaning of diagnostic equipment would include devices such as blood pressure cuffs that measure health data. As noted above, Plaintiff HealthSpot's proposed construction would exclude such equipment. And second, some claims in the patent expressly envision "diagnostic equipment" carrying out measurements, such as blood pressure or weight, without seeming to require a "diagnosis."^{52/} The Court thus concludes that "health test interface" and "diagnostic equipment" should be construed to be interchangeable.

Given this conclusion that "health test interface" and "diagnostic equipment" should be construed together, the question of construing the terms still remains. Plaintiff HealthSpot suggests that "health test interface" means "[a] medical device that takes or performs a measurement of the user."^{53/} Defendant CSI responds that it means a "[d]evice that collects health metrics by performing a test or assisting in the performance of a test on the user."^{54/} These definitions differ only in minor ways.

For one thing, Defendant CSI's definition allows the device to "perform[] a test or assist[] in the performance of a test" while Plaintiff HealthSpot would require the device to "take[] or perform[] a measurement." HealthSpot's position is more faithful to the intrinsic evidence. Throughout the patent, the health test interface and the diagnostic equipment serve the purpose of obtaining measurements.^{55/} Defendant CSI has not adequately supported its position that these terms

^{52/}['436 patent](#), Ex Parte Reexamination Certificate, at col. 2, ll. 65-67 ("The system of claim 20, wherein the diagnostic equipment is configured to measure at least one of user blood pressure and user heart rate."); *id.* at col. 3, ll. 1-3 ("The system of claim 20, wherein the diagnostic equipment is configured to measure user body weight."). Prior to reexamination, the language "configured to measure" in these claims read instead as "capable of measuring." '436 patent, at col. 17, ll. 9-13.

^{53/}Doc. [39-1](#) at 48.

^{54/}*Id.*

^{55/}*E.g.*, ['436 patent](#), at col. 16, ll. 29-31 ("logic for controlling the health test interface to perform measurements on a user to acquire user health test measurement data"); *id.* at col. 16, ll. 60-62 ("diagnostic test data (continued...)")

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include devices that merely “assist[] in the performance of a test.”

The parties’ other dispute is somewhat opaque, but centers on what measurements count. In different ways, both limit the measurements to those that in some way relate to health. Defendant CSI specifies a “device” and limits with the phrase “health metrics,” while Plaintiff HealthSpot limits by specifying a “medical device that takes or performs a measurement of the user.”

At the *Markman* hearing, Plaintiff HealthSpot explained that it believed that its proposed construction would properly exclude measurements of weight. Assuming this characterization of the difference between the proposed constructions is correct, the Court find Defendant CSI’s proposal better supported. In particular, claim 24 recites “[t]he system of claim 20, wherein the diagnostic equipment is configured to measure user body weight.”^{56/} The Court further notes that Defendant agreed at the *Markman* hearing that “health measurements” would mean the same as “health metrics.”^{57/} Finding the phrase “health measurements” clearer, the Court adopts it.

Thus, combining the elements of each of the parties’ proposed constructions the Court finds adequately supported, the Court construes the terms “health test interface” and “diagnostic equipment” to mean “a device that obtains health measurements by taking or performing a measurement of the user.”

5. Health Services and Information System

Defendant CSI suggests that the term “health services and information system” should be

⁵⁵(...continued)
acquired via the diagnostic equipment”). The specification provides further support. *See id.* at col. 6, l. 17 (“The illustrative test interface is a blood pressure cuff” (number referencing figure omitted)).

⁵⁶[‘436 patent](#), Ex Parte Reexamination Certificate, at col. 3, ll. 1-3 (“The system of claim 20, wherein the diagnostic equipment is configured to measure user body weight.”). Prior to reexamination, the language “configured to measure” in this claim read instead as “capable of measuring.” ‘436 patent, at col. 17, ll. 9-13.

⁵⁷Hr’g Tr. at 57.

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construed to mean “[a] system that provides access to a health test interface and one item or more of extended health information.”^{58/} Plaintiff HealthSpot counters that the term is indefinite. If the term is not found to be indefinite, Plaintiff HealthSpot argues that it should be interpreted to be either “[a] kiosk that obtains user health test measurement data and generates a user health test result and may also allow access to non-user specific health information” or “[a] database containing non-user specific medical information.”^{59/}

Although Plaintiff HealthSpot’s position that the “health services and information system” is necessarily tied to the kiosk has some support,^{60/} the Court concludes that Defendant CSI’s proposed construction is superior. In particular, Plaintiff HealthSpot’s first construction would make the claim language improperly redundant. For example, claim 1 discloses, among other elements, “a kiosk . . . providing access to a health services and information system.”^{61/} Using Plaintiff HealthSpot’s first definition would make this claim language mean “a kiosk . . . providing access to a kiosk . . .” Thus, despite the specification language tying the “health services and information system” to the “kiosk,” the Court concludes that the connection comes not from the definition of kiosk itself, but from other claim language.

Plaintiff HealthSpot contends that the ‘436 patent uses the terms “kiosk” and “health services and information system” interchangeably. The Court does not agree. It appears from both the claim

⁵⁸Doc. [39-1](#) at 21.

⁵⁹*Id.*

⁶⁰*See, e.g.,* [‘436 patent](#), at col. 9, ll. 45-48 (“The health services and information system determines a health risk appraisal and presents the appraisal results on the display screen.” (number referencing figure omitted)); *id.* at col. 8, ll. 1-9 (“The health services and information system controls the test interface to perform a blood pressure measurement.” (numbers referencing figures omitted)).

⁶¹*Id.* at col. 14, ll. 48-51.

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language,^{62/} and the figures in the specification^{63/} that the “kiosk” provides access to the “health services and information system” but is not the same thing.

Plaintiff HealthSpot’s second proposed definition fares little better. This construction primarily differs from Defendant CSI’s by omitting the requirement in Defendant CSI’s definition that the “health services and information system” gives access to the “health test interface” in addition to information that the parties alternately describe as “extended health information” or “non-user specific medical information.”

The Court concludes that Defendant CSI’s inclusion of the “health test interface” language in the construction of “health services and information system” is well-supported by the claims and specification. For example, claim 37 discloses a method for, among other things, “providing access to a health services and information system via the user-interactive display.”^{64/} Nothing in the claims suggest that this system is limited to non-user specific health information to the exclusion of, for example, a personalized diagnosis.

Indeed, the specification suggests the opposite. For example, one portion of the specification states that “[t]he health services and information system . . . determines a health risk appraisal and presents the appraisal results on the display screen.”^{65/} The “health services and information system,” therefore, provides access not only to non-user specific information, but also user-specific information, such as an individualized health risk appraisal.

Although the Court generally agrees with Defendant CSI’s construction of “health services

⁶²See, e.g., *id.* at col. 14, l. 45 (“a kiosk-based system”); *id.* at col. 14, ll. 49-52 (“a kiosk . . . providing access to a health services and information system”).

⁶³See, e.g., *id.* at fig. 2.

⁶⁴*Id.* at col. 18, ll. 40-41.

⁶⁵*Id.* at col. 9, ll. 45-46.

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and information system,” the Court modifies this construction in one regard. In particular, the Court concludes that “extended health information” is ambiguous and instead adopts Plaintiff HealthSpot’s phrasing “non-user specific health information.” To the degree “extended health information” was intended to mean “non-user specific health information,” the Court finds the latter phrasing clearer. And to the degree Defendant CSI intended “extended health information” to have a different meaning, the Court concludes that the alternative meaning would lack sufficient support.

Accordingly, the Court construes the term “health services and information system” to be “a system that provides access to a health test interface and one or more items of non-user specific information.”

6. User-Interactive Display

The parties’ dispute over this term centers on whether a “user-interactive display” is necessarily a touchscreen or not.^{66/} Defendant CSI seems to argue that the only way a user can interact with a display is through a touchscreen. According to CSI, other methods, such as a keyboard, mouse, or joystick, do not result in users interacting in with the display itself. In contrast to the typical case where the patent owner argues for the broadest possible construction, the Court again notes that for this term, Defendant CSI’s construction of its patent is narrower than that of Plaintiff HealthSpot. This juxtaposition likely flows from some invalidity argument that prompts the patent owner to argue for a narrower construction.

A broad array of factors counsels against accepting Defendant CSI’s interpretation. For one thing, although the specification does not disclose any embodiments not involving touchscreens, the touchscreens appear in preferred embodiments or as a form that the “user-interactive display”

⁶⁶See Doc. [39-1](#) at 34.

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“generally” takes, not a form that it must take.^{67/}

More importantly, the ‘436 patent contains dependent claims “wherein the user-interactive display comprises a touch-screen display.”^{68/} Plaintiff HealthSpot asserts that under the principle of claim differentiation, these dependent claims with only the touch-screen display difference mean that “user-interactive display” in the independent claims must be broader. Defendant CSI disputes the applicability of claim differentiation because the dependent claim was added in reexamination.^{69/} CSI also correctly notes that claim differentiation is merely one tool to be used in construing claims.

But in this case, the tool of claim differentiation—or at the very least the principle underlying it that terms should not be construed in a fashion that renders claims superfluous—still counsels in favor of reading “user-interactive display” more broadly. Moreover, nothing about the term “user-interactive display” requires the interaction occur through touching the screen. Accordingly, the Court concludes that a “user-interactive display” need not consist of a touch-screen display.

The Court does conclude, however, that Plaintiff HealthSpot’s proposed definition is somewhat too broad. In particular, it would appear to allow for any display to qualify, even one the user could not interact with in any way—for example, a display that functions as no more than an advertising billboard.

Combining these two conclusions, the Court construes “user-interactive display” to mean “a visual display the user can control through a touch-screen or other method of providing input.”

7. Health Test Interface

⁶⁷See, e.g., [‘436 patent](#), at col. 7, ll. 33-35 (“The graphical user interface of the health services and information system is *generally* a touch screen display” (emphasis added)).

⁶⁸‘436 patent, Ex Parte Reexamination Certificate, at col. 6, ll. 15-24.

⁶⁹[Total Containment, Inc. v. Environ Prods., Inc.](#), 106 F.3d 427 (table), 1997 WL 16032 (Fed. Cir. 1997). The Court notes, however, that this case was unpublished, and therefore is not controlling under Federal Circuit rules. [Fed. Cir. R. 32.1](#).

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As noted above, the Court construes the terms “health test interface” and “diagnostic equipment” to mean “a device that obtains health measurements by taking or performing a measurement of the user.”

8. Local Storage Element Allocated for the User

With this and the following term, the Court considers how user data is stored on the kiosk and stored on central servers.

Plaintiff HealthSpot suggests this term should be construed to mean a “[s]pecific portion of the memory that is connected to the single kiosk processor allocated to a specific identified user for local archiving of a user health test result.”^{70/} Defendant CSI responds that it should mean “[p]art of a memory device located at the kiosk where user data is associated with a user identifier.”^{71/}

As an initial matter, the Court notes that some of the differences in the parties’ proposed construction of this term echo those the Court has addressed when construing the term “local storage.” The Court has construed “local storage” to mean “a memory device located at the kiosk that stores user information.” The question then becomes what effect adding “element allocated for the user” to the end of “local storage” has.

The parties’ proposed constructions appear to differ primarily in how long they require archiving and allocation to a specific user to remain in the local storage. In other words, Defendant CSI does not dispute that user health information is temporarily stored in the local storage element allocated for the user, or that this element is allocated to a particular user when that storage occurs. Instead, CSI says that this storage is extremely short term and that both the archiving on the local

⁷⁰Doc. [39-1](#) at 53.

⁷¹*Id.*

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storage element and the allocation of the local storage element disappear when the data is transferred to the remote server.^{72/}

Neither allocation nor archiving are inherently permanent operations. Defendant CSI says that HIPAA regulations would prevent long-term local storage of user information. And CSI further notes that compliance with HIPAA was mentioned during the reexamination proceedings.^{73/} But short-term storage can be consistent with archiving or allocation. Moreover, while Defendant CSI points to portions of the claims and specification indicating that user information is uploaded to remote storage, CSI does not identify any claim or specification language that says the data is also removed from local storage.^{74/} Finally, as noted above, some dependant claims suggest that data need not be automatically transferred out of local memory and into remote memory in all embodiments of the invention.^{75/}

Accordingly, the Court construes “local storage element allocated for the user” to mean “a memory device located at the kiosk that is allocated to a specific identified user and that stores user information.”

9. Remote Storage Element Allocated for the User

Plaintiff HealthSpot suggests that this term should be construed to mean “[a]n individual personal health site hosted by a remote health server that contains the health test result specific to an individual identified user.”^{76/} Defendant CSI responds with a proposed construction of “[p]art of

⁷²Hr’g Tr. at 63-64.

⁷³Doc. [32-5](#) at 4-5.

⁷⁴See Hr’g Tr. at 64-65.

⁷⁵E.g., [‘436 patent](#), at col. 15, ll. 38-39; *see also id.* at col. 19, ll. 46-48 (“The method of claim 37, further comprising: automatically transferring data in the local storage to the remote storage.”).

⁷⁶Doc. [39-1](#) at 58.

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a memory device located at a remote server where a user's data is stored by associating it with a user identifier.”^{77/}

The primary point of disagreement as to this term appears to be whether the phrase “individual personal health site” should be included in the definition. The Court concludes that the prosecution history resolves this question in favor of Plaintiff HealthSpot. In particular, a declaration Defendant CSI submitted during reexamination proceedings stated “[i]n light of the disclosure of the ‘436 patent, one of ordinary skill in the art would understand the ‘remote storage element allocated for the user’ recited in [various claims] of the ‘436 patent as corresponding to the disclosed ‘individual personal health site’ disclosed in the ‘436 patent.”^{78/}

Defendant CSI objects to Plaintiff HealthSpot's proposed construction on two grounds. First, CSI says that HealthSpot's construction differs too much from the construction of “local storage element allocated for the user.” This argument fails. Although it is true that Defendant CSI's proposed construction more closely mirrors that given the similar claim term “local storage element allocated for the user,” the prosecution history mentioned above justifies the difference.

Second, Defendant CSI says that even accepting that an individual personal health site is involved, there is no justification for adding the additional language suggested by Plaintiff HealthSpot. This argument fails for similar reasons to the analysis interpreting “local storage” as storing user information. With the limited exceptions of (1) changing “health test result” to “health information” for consistency with the Court's construction of “local storage” and “local storage

⁷⁷*Id.*

⁷⁸Doc. [34-21](#) at 40; *see also* Doc. [32-5](#) at 5 (“Specifically, the ‘436 patent teaches that individual users have an individual personal health storage site allocated to them on a remote health information server. I understand that CSI referred to this as a personal health record. I understand this term to be recited in the claims as “a remote user storage element.” (internal citation omitted)).

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element allocated for the user,” and (2) using Defendant CSI’s suggestion of a “remote server” rather than Plaintiff HealthSpot’s of a “remote health server,” the Court therefore adopts Plaintiff HealthSpot’s construction.

Accordingly, the Court construes “remote storage element allocated for the user” to mean “an individual personal health site hosted by a remote server that contains health information specific to an individual identified user.”

B. The Logic Terms

Disputed claim terms 10-16 each take the form of logic for accomplishing a particular task. The parties dispute (1) whether these terms should be construed as means plus function terms; (2) the proper construction of “logic”; and (3) for some of the terms, the proper construction of the remaining portion of the terms. The Court resolves the first question for all seven claims together, the interpretation of “logic” for the remaining claims except claim 15 together, and the third question for each claim in turn.^{79/}

First, the Court agrees with Plaintiff HealthSpot that these terms should be construed as means plus function terms. Defendant CSI is correct that because neither “means” nor “step” appears in these terms, there is a strong presumption that they are not means plus function terms.^{80/} But this presumption, although it is a strong one, can be overcome where the claims fail to “provide ‘sufficiently definite structure,’ to a person of ordinary skill in the art, for performing the recited

⁷⁹The Court addresses “logic” in claim 15 with the remainder of claim 15 rather than with the remainder of the “logic” terms because the parties’ dispute over “logic” in claim 15 differs from the corresponding dispute for the other six logic claims.

⁸⁰[*Phillips v. AWH Corp.*, 415 F.3d 1303, 1311 \(Fed. Cir. 2005\) \(en banc\)](#) (citing [*Personalized Media Commc’ns, LLC v. Int’l Trade Comm’n*, 161 F.3d 696, 703-04 \(Fed. Cir. 1998\)](#)).

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function.”^{81/}

Defendant CSI points out that each of the logic terms are listed in the patent as one element that the controller must comprise. CSI says that the controller provides the structure necessary to prevent these terms from being means plus function. The Court does not agree. As the Federal Circuit has noted, “to one of skill in the art, the ‘structure’ of computer software is understood through, for example, an outline of an algorithm, a flowchart, or a specific set of instructions or rules.”^{82/} Thus, reciting the physical structure of a computer—or, in this case, a controller—is typically neither necessary nor sufficient to avoid means plus function claiming.^{83/}

In this case, the patent gives no disclosure of the algorithm or type of program to be used to carry out the basic logic functions. Indeed, one part of the specification reads “the processor executes a logic (not shown).”^{84/} Accordingly, the Court concludes that these terms are stated in means plus function format.

Having concluded that the logic terms are stated in means plus function format, the Court now turns to construing the means part of the disputed terms, i.e., “logic.” Each party proposes a consistent construction of this portion of the disputed terms across all logic terms except term 15. Plaintiff HealthSpot says that “[s]oftware, firmware, control logic, or other executable forms that are executed by the single kiosk processor” is the best construction, while Defendant CSI proposes a construction of “[s]oftware, firmware, control logic, or any other computer-executable code.” The proposed constructions thus differ in two ways. First, there is a minor difference in the lists that

⁸¹ [*Apple, Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1303 \(Fed. Cir. 2014\)](#).

⁸² *Id.* at 1298 (internal citation omitted).

⁸³ *Id.* at 1298-99.

⁸⁴ [436 patent](#), at col. 4, ll. 5-6 (number referencing figure omitted).

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begin each definition. And second, Plaintiff HealthSpot would require that the “controller” performs the “logic” in the definition of “logic,” while Defendant CSI would not.

As to the first difference, the Court does not detect a meaningful difference between Plaintiff HealthSpot’s suggestion of “other executable forms” and Defendant CSI’s suggestion of “any other computer-executable code.” Noting that HealthSpot’s formulation, unlike CSI’s, is drawn from the specification,^{85/} the Court adopts HealthSpot’s formulation.

Second, Plaintiff HealthSpot’s suggestion that the definition of “logic” includes a reference to the controller is well taken. The Court has interpreted “controller” as requiring incorporated logic.

Defendant CSI argued to the PTO that its controller incorporated logic when CSI overcame the PTO’s finding that CSI’s claims were anticipated. Moreover, the patent specifies that the “controller . . . compris[es]” the logic terms.^{86/} Including controller in the definition of the logic terms would do the same. Defendant CSI obtained the ‘436 patent by arguing that the logic was inherent in the controller.

Accordingly, the Court construes the “logic” portion of the logic terms to mean “software, firmware, control logic, or other executable forms incorporated in the controller.”

10. Logic for Controlling Storage of the User Health Test Result in the Local Storage in a User Local Storage Element Allocated for the User

The parties’ respective proposed constructions of the function part of this term mirror their proposed constructions of the term “user local storage element allocated for the user.” For similar reasons to those given in construing that term, the Court concludes that the function portion of this

⁸⁵*Id.* at col. 4, ll. 8-9.

⁸⁶*E.g., id.* at col. 14, ll. 55-57.

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term means “for controlling storage of the user health test result in a memory device located at the kiosk that is allocated to a specific identified user and that stores user information.”

Accordingly, the Court construes this term as a whole to mean “software, firmware, control logic, or other executable forms incorporated in the controller for controlling storage of the user health test result in a memory device located at the kiosk that is allocated to a specific identified user and that stores user information.”

11. Logic for Controlling Storage of the Health Test Result in the Remote Storage in a User Remote Storage Element Allocated for the User

The parties’ respective proposed constructions of the function part of this term mirror their proposed constructions of the term “user remote storage element allocated for the user.” For similar reasons to those given in construing that term, the Court concludes that the function portion of this term means “for controlling storage of the user health test result on an individual personal health site hosted by a remote server that contains health information specific to an individual identified user.”

Accordingly, the Court construes this terms as a whole to mean “software, firmware, control logic, or other executable forms incorporated in the controller for controlling storage of the user health test result on an individual personal health site hosted by a remote server that contains health information specific to an individual identified user.”^{87/}

12. Logic for Controlling the Health Test Interface to Perform Measurements on a User to

⁸⁷Plaintiff HealthSpot’s proposed construction also includes several additional steps that appear to attempt to clarify the meaning of “user health test result.” In particular, instead of simply reciting that the logic must allow a user health test result to be stored, HealthSpot says that the definition of this term should also specify that the logic directs that the “single kiosk processor uploads a result generated by the single kiosk processor from data and measurements received from a medical device that has taken or performed a measurement of the user.” [Doc. 39-1](#) at 71. The Court does not agree. These additional steps unnecessarily complicate the plain meaning of “user health test result.”

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Acquire User Health Test Measurement Data

For this term, with the minor exceptions discussed in the footnote below, the parties dispute only the means portion of the definition. Combining the means construction adopted above with the effectively undisputed function construction, the Court construes this term to mean “software, firmware, control logic, or other executable forms incorporated in the controller for controlling the health test interface to perform measurements on a user to acquire user health test measurement data.”^{88/}

13. Logic for Processing the User Health Test Measurement Data to Generate a User Health Test Result

For this term, with only one minor exception, the parties agree on the construction that should be given to the function portion of the term. Combining the means construction adopted above with the effectively undisputed function construction, the Court construes this term to mean “software, firmware, control logic, or other executable forms incorporated in the controller for processing the user health test measurement data to generate a user health test result.”^{89/}

14. Logic for Controlling Display of the User Health Test Result and a Health Test Result History via the User-Interactive Display

Here, too, with the exception of a minor difference in phrasing, the parties dispute only the means portion of this construction. Combining the means construction adopted above with the

⁸⁸The Court notes and accepts the parties’ agreement that claim 1 of the patent’s recitation of “performing” rather than “perform” is a typographical error that should be ignored. Doc. [38](#) at 23 n.8. The Court further notes that Defendant CSI’s proposed construction would substitute “to perform a test on the user” for “to perform measurements on a user.” Doc. [39-1](#) at 79. Neither party has explained if or how this difference is important, and the Court resolves this minor difference in favor of Plaintiff HealthSpot’s construction, which matches the actual claim language.

⁸⁹The only difference in the parties’ constructions of the function portion of this term is that Defendant CSI would omit the “the” that appears immediately before “health test measurement data.” The Court resolves this minor dispute in Plaintiff HealthSpot’s favor because HealthSpot’s construction matches the claim language.

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effectively undisputed function construction, the Court construes this term to mean “software, firmware, control logic, or other executable forms incorporated in the controller for controlling display of the user health test result and a health test result history via the user-interactive display.”^{90/}

15. Logic, at Least Partly Executable on the Controller and at Least Partly Executable on the Remote Server, Providing Access to Health-Related Information via the Interactive Display^{91/}

Plaintiff HealthSpot says that this term should be construed as “[s]oftware, firmware, control logic, or other executable forms that are executed by the single kiosk processor and a remote server providing access to health-related information via the interactive display.”^{92/} Defendant CSI responds with a proposed construction of “[s]oftware, firmware, control logic or any other computer-executable code executed in part on the controller and in part on a remote server to provide access to health-related information via the user-interactive display.”^{93/}

To the degree the proposed constructions differ in meaning from each other, the Court finds that hewing closer to the claim language provides the best construction. That means adopting some of Plaintiff HealthSpot’s construction, such as “interactive display” rather than “user-interactive display,” and some of Defendant CSI’s construction, such as including “in part.”

Accordingly, the Court construes this term to mean “software, firmware, control logic, or other executable forms, executed in part on the controller and in part on the remote server, providing access to health-related information via the interactive display.”

⁹⁰Defendant CSI would say “a history of health test results” rather than “a health test result history.” Doc. [39-1](#) at 89. Absent argument to the contrary, the Court adopts the phrasing used in the patent and proposed by Plaintiff HealthSpot.

⁹¹The parties’ claim chart lists this term “Logic, at least partially” *Id.* at 96. The actual claim language, however, is “Logic, at least *partly*” [‘436 patent](#), at col. 16, l. 39 (emphasis added).

⁹²Doc. [39-1](#) at 96.

⁹³*Id.*

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16. Logic for Receiving from the Remote Server Health-Related Services and Information

In addition to their usual disagreement over the means portion of this term, the parties slightly disagree as to the function portion. In particular, Defendant CSI suggests replacing “the remote server” with “a different computer.”^{94/} Defendant CSI has provided no argument, either in its briefing or at the *Markman* hearing, in support of this suggestion. The Court thus adopts Plaintiff HealthSpot’s approach, which mirrors the actual claim language.

Accordingly, the Court construes this term to mean “software, firmware, control logic, or other executable forms incorporated in the controller for receiving from the remote server health-related services and information.”

IV. Conclusion

For the foregoing reasons, the Court construes the disputed claim terms in the manner described above.

IT IS SO ORDERED.

Dated: April 2, 2015

s/ James S. Gwin
JAMES S. GWIN
UNITED STATES DISTRICT JUDGE

⁹⁴*Id.* at 100.